ABSTRACT OF THE DISCLOSURE

A positive electrode active material for a lithium ion secondary battery is a lithium-containing composite oxide represented by the chemical formula: $Li_a(Co_{1-x-y}Mg_xAl_y)_bM_zO_c$, where M is at least one element selected from the group consisting of Na and K, and the values a, b, c, x, y and z respectively satisfy $0 \leqq a \leqq 1.05$, $0.005 \leqq x \leqq 0.15$, $0.0001 \leqq y \leqq 0.01$, $0.0002 \leqq z \leqq 0.008$, $0.85 \leqq b \leqq 1.1$ and $1.8 \leqq c \leqq 2.1$.

This makes it possible to improve a high temperature storage characteristics and safety of the lithium ion secondary battery.